

- 9 -

**CLAIMS:**

1. A retractor for use in surgery, the retractor having two arms each adapted to carry a blade engageable with one side of an incision, the two arms being connected by a pivot at one end portion such that the arms can be pivoted between a closed position and an adjustable open position in which the arms define a substantially V-shaped configuration in which the blades maintain the sides of the incision in inclined relation, and means for retaining the arms in the open position, wherein each retractor blade has a mounting portion engageable on the arm so as to at least partially surround the arm and displaceable longitudinally along the arm, and wherein the arm is shaped to provide a series of abutment edges spaced in the longitudinal direction of the arm and engageable with a part of the mounting portion of the blade so as to lock the mounting portion to the arm against displacement from a selected position along the arm at least in one longitudinal direction.
2. A retractor for use in surgery, the retractor having two arms each adapted to carry a blade engageable with one side of an incision, the two arms being connected by a pivot at one end portion such that the arms can be pivoted between a closed position and an adjustable open position in which the arms define a substantially V-shaped configuration in which the blades maintain the sides of the incision in inclined relation, and means for retaining the arms in the open position, wherein each retractor blade has a mounting portion engageable on the arm so as to at least partially surround the arm and displaceable longitudinally along the arm, and wherein the arm is shaped to provide a series of abutment edges spaced in the longitudinal direction of the arm and engageable with a part of the mounting portion of the blade when the mounting portion is inclined relative to the arm after movement along the arm into a selected position so as to lock the mounting portion to the arm against displacement from the selected position at least in one longitudinal direction.
3. A retractor according to claim 1 or claim 2, wherein the abutment edges are formed by series of grooves or notches spaced along the arm.

- 10 -

4. A retractor according to any one of claims 1 to 3, wherein the exterior shape of the arm and the interior shape of the mounting portion of at least one of the blades are so related that the mounting portion is able to freely rotate about the axis of the arm.
- 5 5. A retractor according to any one of claims 1 to 3, wherein the exterior shape of the arm and the interior shape of the mounting portion of at least one of the blades are so related that the mounting portion is able to be locked to the arm in a selected angular position against rotation about the axis of the arm.
- 10 6. A retractor according to any one of claims 1 to 5, wherein the arm is of polygonal cross-section.
7. A retractor according to claim 4 and claim 6, wherein the mounting portion has a smooth interior surface able to rotate about the arm.
- 15 8. A retractor according to claim 5 and claim 6, wherein the mounting portion has an inner surface having longitudinal grooves adapted to engage with corner portions of the polygonal cross-section in order to lock the mounting portion against rotation in a selected angular position relative to the arm.
- 20 9. A retractor according to claim 7 or claim 8, wherein the diameter of the inner surface of the mounting portion is slightly greater than the diameter of the polygonal cross-section to permit the axis of the mounting portion to incline through a small angle relative to the axis of the arm to thereby permit locking of the mounting portion in a selected position along the length of the arm by co-operation with an adjacent abutment edge.
- 25 10. A retractor according to claim 1 or claim 2, wherein the arm is of circular cross-section having a series of longitudinally directed notched ridges or grooves to co-operate with the mounting portion, the notches providing the abutment edges.
- 30 11. A retractor according to claim 10, wherein the ridges or grooves co-operate with

- 11 -

formations on the mounting portion of at least one of the blades to lock the mounting portion in a selected angular position against rotation about the axis of the arm.

12. A retractor according to claim 1 or claim 2 in combination with a set of said  
5 retractor blades, wherein the mounting portions of some of the blades are so configured in relation to the shape of the arms that the mounting portion is able to rotate about the axis of the arm and the mounting portions of others of the blades are so configured in relation to the shape of the arms that the mounting portion can be locked in a selected angular position about the axis of the arm.

10

13. A retractor for use in surgery having two arms each removably mounting a blade, the arms being connected by a pivot at one end portion so that the arms can be swung between a closed position and an adjustable open position in which the arms define a substantially V-shaped configuration in which the blades maintain the sides of an incision  
15 in inclined relation in the open position, each blade having a mounting portion engageable on the arm so as to at least partially surround the arm for displacement longitudinally along the arm into a selected position, the blade being lockable to the arm against longitudinal displacement out of its selected position in at least one direction by displacement between the mounting portion and the arm after movement into the selected position.

20

14. A retractor according to claim 13, wherein the locking displacement results from skewing the mounting portion relative to the arm after movement along the arm into the selected longitudinal position.

25 15. A retractor according to claim 13 or claim 14, wherein the mounting portions of the blades are freely rotatable about the arms.

16. A retractor according to claim 13 or claim 14, wherein the mounting portions of the blades are so configured in relation to the shape of the arms that they can be locked in a  
30 selected angular position about the axis of the arms.

- 12 -

17. A retractor for use in surgery having two arms each removably mounting a blade, each blade having a mounting portion engageable on the arm so as to at least partially surround the arm for displacement longitudinally along the arm into a selected position, the blade being lockable to the arm against longitudinal displacement out of its selected position in at least one direction by displacement between the mounting portion and the arm after movement into the selected position.
18. A retractor according to claim 17, wherein the locking displacement results from skewing the mounting portion relative to the arm after movement along the arm into the selected longitudinal position.
19. A retractor for use in surgery having arms movable between closed and open configurations, and blades carried by the arms via mounting portions which can slide along the arms to provide adjustment in position, the blades being locked in a selected position by skewing the mounting portions on the arms.